61 9

45

3

15

Comparison of MetAP2 Homologues (mouse = SEQ ID NO:13; rat = SEQ ID NO:17;

= SEQ ID NO:14)

= SEQ ID NO:12; yeast

human

Title: Inventor(s): Appln. No. Docket #

> 263 263 206

> > KVDYGVQVNGNIIDS

KIDFGTHISGRIIDC

KIDFGTHISGRIIDC KIDFGTHISGRIIDC

255

PNAGDTTVLQYDDIC PNAGDITVLQYDDIC PNAGDITVLQYDDIC PNAGDKTVLKYEDVM

FPTGCSLNNCAAHYT

----IA

NGLNAG---

ICEKLEDCSRKLIKE ICEKLEDCSRKLIKE

KYVMSWIKPGMTMIE KYVMSWIKPGMTMIE KYVMSWIKPGMTMIE

nouse

human yeast

FPTGCSLNNCAAHYT FPTGCSLNNCAAHYT

NGLNAG----LA

NGLNAG-----LA

RAIKDRIVPGMKLMD IADMIENTTRKYTGA

ICEKLEDCSRKLIKE

ENLLAMEDPKSQGIG FPTGLSLNHCAAHFT

Dominant Negative Variants of Methionine Aminopeptidase 2 and Clinical Uses Therefor Chang et al. 10/712,359 66153/45004

296

386

443 443

443

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353 353

HAGKTVPIVKGGEAT

345

ESYEVEIDGKTYQVK PIRNLNGHSIGPYRI

. 330

316

315

300

AVKDATNTGIKCAGI

AFTVTENPKYDILLT AFTVTFNPKYDILLK

mouse

rat

285

AVKDATNTGIKCAGI

AVKDATNTGIKCAGI

AFTVTFNPKYDTLLK

human

DVRLCDVGEAIQEVM DVRLCDVGEAIQEVM DVRLCDVGEAIQEVM

ESYEVEIDGKTYQVK PIRNLNGHSIGPYRI

ESYEVEIDGKTYQVK

PIRNLNGHSIGQYRI

HAGKTVPIVKGGEAT HAGKTVPIVKGGEAT

	••	
0000	180 180 180	? •
45 46 90 4AKKKRRKKKKG KGAVSAVQQELDKES GALVDEVAKQLESQA LEEKERDDDDEDGDG AAKKKRRKKKKG KGAVSAQQELDKES GALVDEVAKQLERQA LEEKEKDDDDEDGDG AAKKKRRKKKKKG KGAVSAGQQELDKES GTSVDEVAKQLERQA LEEKEKDDDDEDGDG AAKKKRRKKKKKS KGPSAAGEQEPDKES GASVDEVARQLERSA LEDKERDEDDEDGDG AAKKKRRKKKKKS KGPSAAGEQEPDKES GASVDEVARQLERSA LEDKERDEDDEDGDG AAKKRRKKKKS KGPSAAGEQEPDKES GASVDEVARQLERSA LEDKERDEDGDGDG AAKKRRKKKKKS KGPSAAGEQEPDKES GASVDEKELNLENEG VEQQDQAKADESDFV	180 NDFREAAEAHROVR NDFREAAEAHROVR NDFREAAEAHROVR	9
75 7 ESQA L ERQA L ERSA L	165 1 SEEI W SEEI W SEEI W	255 256
61 GALVDEVAKQL GTSVDEVAKQL GASVDEVARQL SPASDLKELNL	151 TSEEKKALDQA TSEEKKALDQA TSEEKKALDQA SRYLKRDLERA	241
60 61 GAVSAVQQELDKES GAI GAVSAGQGELDKES GTS GPSAAGEQEPDKES GAS	36 XPPTQDGRTAAWRT TSEI YPPTQDGRTAAWRT TSEI XPPTQDGRTAAWRT TSEI YHQDFNLQRTTDEE SRYI	26 240 241
mouse MAGVEQAASFGGHLN GDLDPDDREEGTSST AEEAAKKKRKKKKKKKKK KGAVSAVQQELDKES GALVDEVAKQLESQA LEEKERDDDDEDGDG rat MAGVEEASSFGGHLN RDLDPDDREEGTSST AEEAAKKKRKKKKKKKKKK KGAVSAQQELDKES GALVDEVAKQLESQA LEEKERDDDDEDGDG human MAGVEEVAASGSHLN GDLDPDDREEGAAST AEEAAKKKRKKKKKKKKKKKKKKKKKKKKKKKKKKKKKK		211 225 226
LN GDLDPDDREEGTSST AEEALN RDLDPDDREEGTSST AEEALN GDLDPDDREEGAAST AEEA	106 KRGPKVQTDPPSVPI CDLY KRGPRVQTDPPSVPI CDLY KRGPKVQTDPPSVPI CDLY	
MAGVEQAASFGGHLN MAGVEEASSFGGHLN MAGVEEVAASGSHLN	91 106 DADGATGKKKKKKK KRGF DGDGAAGKKKKKKKK KRGP DGDGATGKKKKKKKK KRGP ESKKKKNKKKKKK N	181 195 196
mouse rat human yeast	mouse rat human yeast	

HGGKSVPIVKNGDTT MKNFDVGHVPIRLPR TKHLLNVINENFGTL AFCRRWLDRLGESKY LMALKNLCDLGIVDP LMALKNLCDLGIVDP LMALKNLCDLGIVDP AKNLLKTIDRNFGIL PFCRRYLDRLGQEKY LFALNNLVRHGLVQD MKNFDVGHVPIRLPR TKHLLNVINENFGTL AFCRRWLDRLGESKY 435 TKHLLNVINENFGTL AFCRRWLDRLGESKY DVRLTDIGEAIQEVM ESYEVEINGETYQVK PCRNLCGHSIAPYRI 420 406 405 ARSAEDHQVMPTLDS MKNFDVGHVPIRLPR 390 TGKGVVHDDMECSHY TGKGVVHDDMECSHY TGRGYVTAGGEVSHY TGKGVVHDDMECSHY yeast AFTVSFDPQYDNLLA AVKDATYTGIKEAGI 376 375 RMEEGEVYAIETFGS RMEEGEVYAIETFGS KMEEGEHFAIETFGS RMEEGEVYAIETFGS human /east rat

480 478 421 EEMTIKT EHTILLRPICKEVVS RGDDY--EHTILCAQPVKKLSA EHTILLRPTCKEVVS EHTILLHAHKKEVVS 465 mouse YPPLCDIKGSYTAQF YPPLCDIKGSYTAQF YPPLCDIKGSYTAQF YPPLNDIPGSYTAQF human, yeast rat

Figure 1



Dominant Negative Variants of Methionine Aminopeptidase 2 and Clinical Uses Therefor

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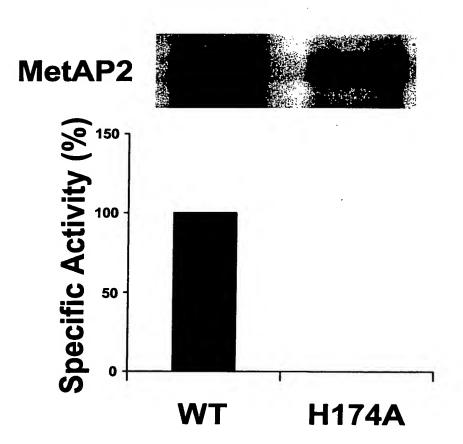


Figure 2

Dominant Negative Variants of Methionine Aminopeptidase 2 and Clinical Uses Therefor

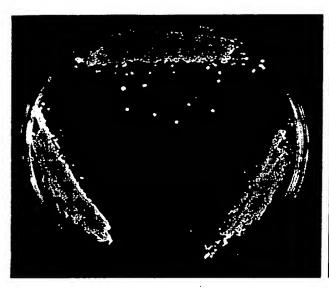
Inventor(s): Appln. No.

Chang et al. 10/712,359 66153/45004

Docket #

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A. Glucose

B. Galactose

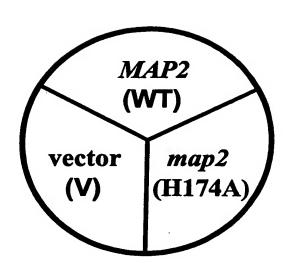


Figure 3

Dominant Negative Variants of Methionine Aminopeptidase 2 and Clinical Uses Therefor Chang et al. 10/712,359 66153/45004 Title:

Inventor(s): Appln. No. Docket #

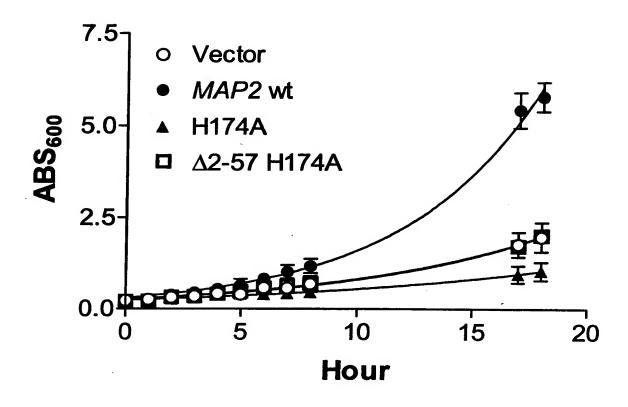
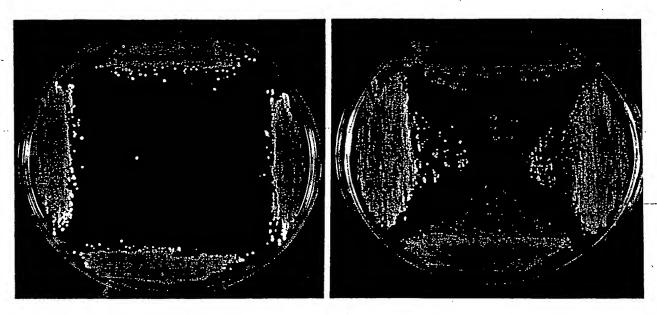


Figure 4

Dominant Negative Variants of Methionine Aminopeptidase 2 and Clinical Uses Therefor

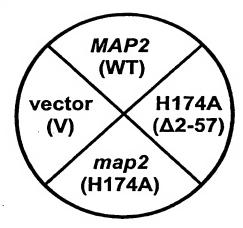
Chang et al. 10/712,359 Inventor(s): Appln. No. Docket # 66153/45004

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A. Glucose

B. Galactose



H174A-MetAP2 requires N-terminal residues 2-57 for inhibition of map1Δ growth under the GAL1 promoter.

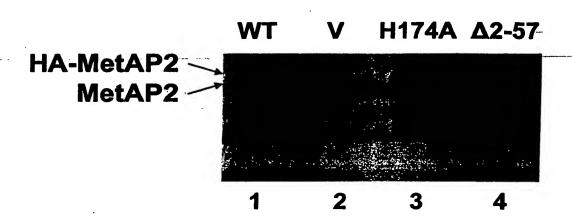
Figure 5

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The steady levels of each MetAP2 construct are comparable. Immunoblot comparison of HA-MetAP2 wt, HA-MetAP2 H174A, and MetAP2 Δ 2-57 H174A steady state levels in map1 Δ .

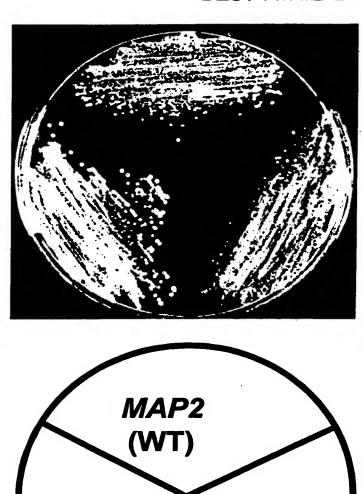
Figure 6

Dominant Negative Variants of Methionine Aminopeptidase 2 and Clinical Uses Therefor

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Overexpression of H174A-MetAP2 under the GPD promoter does not inhibit the growth of map2\Delta

map2 (H174A)

Vector

Figure 7

Dominant Negative Variants of Methionine Aminopeptidase 2 and Clinical Uses Therefor Chang et al. 10/712,359 66153/45004 Title:

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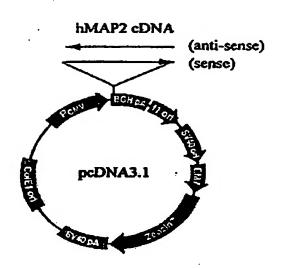


Figure 8

Dominant Negative Variants of Methionine Aminopeptidase 2 and Clinical Uses Therefor Chang et al. 10/712,359 66153/45004

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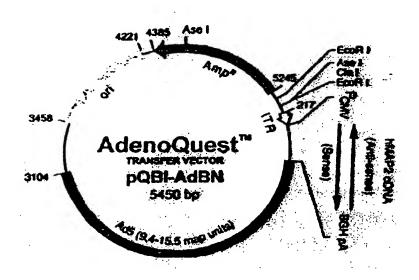


Figure 9

Title: Dominant Negative Variants of Methionine Aminopeptidase 2 and Clinical Uses Therefor

Inventor(s): Chang et al.
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Docket # 66153/45004

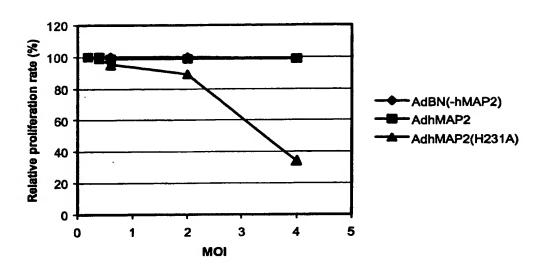


Figure 10

Title: Dominant Negative Variants of Methionine Aminopeptidase 2 and Clinical Uses Therefor Chang et al. 10/712,359 66153/45004 Inventor(s): Appln. No. BEST AVAILABLE COPY Docket #

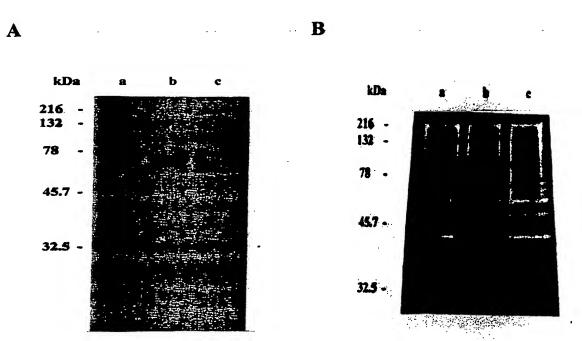


Figure 11